

DK-US030061

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	<b>Attn: Mail Stop AF</b>
Kazuhide MIZUTANI et al.	:	Patent Art Unit: 3744
Serial No. 10/521,020	:	Examiner: Mohammad M. Ali
Filed: January 12, 2005	:	<b>Confirmation No. 9469</b>
For: REFRIGERANT PIPE WASHING METHOD,	:	<b><i>AMENDMENT AFTER</i></b>
AIR CONDITIONER UPDATING METHOD,	:	<b><i>FINAL REJECTION</i></b>
AND AIR CONDITIONER	:	

**REQUEST FOR PRE-APPEAL CONFERENCE**

Assistant Commissioner of Patents  
Washington, DC 20231

Sir:

In accordance with the Official Gazette Notice for July 12, 2005, Applicants hereby request a Pre-Appeal Conference to review the November 13, 2009 final rejection in the above-identified application for the reasons set forth below. The Examiner's omission of essential elements needed for a *prima facie* rejection presents a clear legal or factual deficiency in the rejections. Thus, the rejections are suitable for consideration in a Pre-Appeal Conference.

A Notice of Appeal and the appropriate fees are filed with this request. No fee is believed to be due for the proper submission of the request. However, the Commissioner is authorized to charge any fees necessary associated with an extension of time to Deposit Account No. 50-1836.

**BACKGROUND**

Claims 5-7, 11 and 12 are pending with claims 7 and 11 being the only independent claims. In the January 21, 2010 Office Action ("the Office Action"), claims 5-7, 11 and 12 were finally rejected under 35 U.S.C. §102(a) as (A) being anticipated by Japanese Patent Publication No. 2002-357377 to Unezaki et al. and as (B) being anticipated by U.S. Patent No. 5,806,329 (Taira et al.).

### CONCISE EXPLANATION OF ARGUMENT

Applicants respectfully submit that claims 5-7, 11 and 12 are *not* anticipated by (A) the Unezaki et al. publication or (B) the Taira et al. patent because each publication *fails to* disclose *each* and *every* element of the claims within the reference.

(1) Specifically, neither references discloses

*new working refrigerant that serves as a cleaning agent comprising an HFC refrigerant containing at least 40 wt% of R32 but containing no R134a refrigerant* of independent claim 11, nor

*a new heat source unit and a new user unit that are connected together by the existing refrigerant piping with a replaced working refrigerant disposed therein, the replaced working refrigerant being an HFC refrigerant containing at least 40 wt% of R32 that serves as a cleaning agent but contains no R134a refrigerant* of independent claim 7.

In the Unezaki et al. publication, R407C is used as a washing agent (instead of the HCFC 141b and HCFC 225) and as a replacement refrigerant. R407C includes 23 wt% R32, 25 wt% R125 and 52 wt% R134a. R407C has less than 40 wt% R32 and a significant wt% (a majority) of R134a. See paragraphs [0012]-[0017] and [0044]-[0048]. The Unezaki et al. publication makes no mention of using the *HFC refrigerant containing at least 40 wt% of R32 but containing no R134a* as claimed. It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each and every element of the claim within the reference. Since the Unezaki et al. publication does not disclose or suggest *HFC refrigerant containing at least 40 wt% of R32 but containing no R134a*, the Unezaki et al. publication cannot anticipate independent claims 11 and 7 under 35 U.S.C. §102(b). Accordingly, withdrawal of this rejection based on the Unezaki et al. publication is respectfully requested.

In the Taira et al. patent, no particular washing liquid and/or new refrigerant are disclosed whatsoever. Rather, this reference discusses many details of the system such as operating temperatures and pressures without reference to any particular washing/replacement refrigerant. In fact, the Office Action appears to acknowledge that *HFC refrigerant containing at least 40 wt% of R32 but containing no R134a*, as claimed, is not disclosed or suggested the Taira et al. patent or the Unezaki et al. publication. Specifically, the Office Action indicates at page 4 that "Taira et al's system is capable of using the same refrigerant with the same composition because existing refrigerant system

containing Chlorine or Ozone depletion refrigerant can be replaced by the friendly environmental refrigerant as mentioned above and it is a well known feature in the art.” However, it is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each and every element of the claim within the reference. In this case, the Taira et al. patent, as explained above and as acknowledged in the Office Action, cannot disclose or suggest ***HFC refrigerant containing at least 40 wt% of R32 but containing no R134a*** as well as the other features of independent claims 11 and 7. Thus, the Taira et al. patent cannot anticipate independent claims 11 and 7 under 35 U.S.C. §102(b). Accordingly, withdrawal of this rejection based on the Taira et al. patent is respectfully requested.

(2) JP2002-357377 (the Unezaki et al. publication) does not disclose or suggest ***the oil collecting device being disposed in the new heat source unit*** as required by independent claims 7 and 11. Accordingly, the Unezaki et al. publication cannot anticipate the claims.

(3) U.S. Patent No. 5,806,329 (the Taira et al. patent) does not disclose or suggest ***existing refrigerant piping that was used with an existing air conditioner being composed of an old heat source unit and an old user unit and contains residue of an existing mineral-oil-based refrigerant oil, the existing refrigerant piping being connected the old heat source unit and the old user unit, the existing refrigerant piping being reused as is when updating the air conditioner is complete***, as set forth in independent claims 7 and 11. Accordingly, the Taira et al. patent cannot anticipate the claims.

(4) The Office Action asserts that the piping washing station 11 of the Unezaki et al. publication is the new heat source unit of the claims. However, the piping washing station 11 of the Unezaki et al. publication is removed after the washing operation. On the other hand, the new source unit of claims is part of the refurbished air conditioner/not removed after the washing operation. Therefore, the piping washing station 11 of the Unezaki et al. publication cannot be considered the new heat source unit of the claims.

(5) The Office Action asserts that the separation recovery system 9 of the Unezaki et al. publication is the oil collecting device of the claims. However, the separation recovery system 9 of the Unezaki et al. publication is disposed in the piping washing station 11. On the other hand, the oil collecting device of the claims is disposed in the new heat source unit. Therefore, the separation recovery system 9 of the Unezaki et al. publication cannot be considered the oil collecting device of the claims.

(6) The Office Action asserts that the compressor 1 and condenser 3 of the Unezaki et al. publication are the new heat source unit of the claims, that the evaporator 8 of the Unezaki et al. publication is the new user unit of the claims, and that the oil separator 2 of the Unezaki et al. publication is the oil collecting device of the claims. However, the compressor 1, condenser 3, evaporator 8 and oil separator 2 are devices that compose the piping washing station 11 and these devices are removed after the washing operation. Moreover, the oil separator 2 of the Unezaki et al. publication is not a device that separates the existing refrigerant oil. Therefore, the compressor 1 and condenser 3 of the Unezaki et al. publication cannot be considered the new heat source unit of the claims, the evaporator 8 of the Unezaki et al. publication cannot be considered the new user unit of the claims, and the oil separator 2 of the Unezaki et al. publication cannot be considered the oil collecting device of the claims.

(7) The Office Action asserts that the field piping 16, 17 of the Taira et al. patent are the existing refrigerant piping of the claims. However, the field piping 16, 17 of the Taira et al. patent are not piping that was used with the existing air conditioner. Therefore, the field piping 16, 17 of the Taira et al. patent cannot be considered the existing refrigerant piping of the claims.

(7) The Office Action asserts that the field piping 16, 17 of the Taira et al. patent contain residue of the existing refrigerant oil of the claims. However, the residue in the refrigerant circuit of the Taira et al. patent is cutting oil, rolling oil, tube-expanding oil and process oil. On the other hand, the existing refrigerant oil of the claims is the existing mineral-oil-based refrigerant oil. Therefore, the field piping 16, 17 of the Taira et al. patent cannot be considered to contain residue of the existing refrigerant oil of the claims.

(9) The Office Action asserts that the receiver 12 of the Taira et al. patent is the oil collecting device of the claims. However, the receiver 12 of the Taira et al. patent is a device that collects cutting oil, rolling oil, tube-expanding oil and process oil. On the other hand, the oil collecting device of the claims is device that collects the existing refrigerant oil. Therefore, the receiver 12 of the Taira et al. patent cannot be considered the oil collecting device of the claims.

***Additional Reference mentioned in rejections***

Additionally, both rejections (A) and (B) rely on U.S. Patent No. 5,495,057 (Nam et al.) at column 1, lines 41-41 as evidence that the claimed refrigerant is well known.

First, Applicants believe this reference cannot be relied upon in combination with either Japanese Patent Publication No. 2002-357377 to Unezaki et al. or U.S. Patent No. 5,806,329 (Taira et al.) to reject the claims under 35 U.S.C. §102. Second, this reference does not disclose or suggest the manner in which the claimed refrigerant is used in the claims. Thus, including this reference as evidence does not account for the deficiencies of the Unezaki et al. publication and/or the Taira et al. patent explained above.

### CONCLUSION

In view of the above comments, Applicants respectfully request that the rejections be withdrawn. Applicants respectfully assert that claims 5-7, 11 and 12 are in condition for allowance.

Respectfully submitted,

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